MICROWORM STARTER CULTURE

grow your own live food for fry or small fish

This is a starter culture of microworms (***Panagrellus redivivus***) that can easily be cultured at home for feeding newly-hatched fish, or as a live food for a variety of small fish and crustacean species. Females reach maturity in about three days and deliver live young so you can easily scale this culture up to provide a continuous supply of live microworms. New cultures should be made before the media goes bad to insure your culture doesn't crash.

The lifespan of the Microworms are 20-30 days and the Nematodes start to reproduce at three days old and bear 40 young every 1-2 days. The Microworm Nematodes are primarily used to feed fish fry (newborn fish), which are too small to eat baby brine shrimp and other foods. Adult Fish and Aquarium Bottom Feeders Love Microworms. The Microworms are also used as a supplement & treat for larval newts/sallies, frog tadpoles, tropical fish and bottom feeding aquarium fish of all types.

INSTRUCTIONS: You will need a container to grow them in. Clear containers with resealable lids are the most convenient. Some popular options include yogurt tubs, mason jars, and resealable plastic food containers. You should punch some holes in the lid for air exchange. Cover the holes or stuff filter floss in the holes to keep fruit flies from getting in.

For food, any type of human food-grade starch is usable. Common sources of starch include oatmeal, wheat flour, bread, cornmeal, mashed potatoes, and cereal. Microworms don't actually eat the starch. Instead, they eat microscopic yeast that feed on carbohydrates. Normal baking or brewing yeast will work. When dividing or reculturing your microworms there may be enough yeast in the starter that adding more may not be needed.

Cover the bottom of your container with around half an inch (1.6 centimeters) of whatever starch you have. This doesn't need to be cooked but be sure to allow it to cool before adding the yeast and microworms if you do heat it. Try not to add too much water. You want a creamy consistency.

Add the culture. The more worms you start with, the faster they will grow but even a small amount can multiply into a usable culture in a few weeks.

Cooler temperature will slow the worms metabolism down. In the refrigerator a culture can stay alive for over 6 months. Room temperature will allow them to reproduce and multiply faster but the culture will not last as long before needing recultured. Microworms have the ability to tolerate temperatures ranging from below 32°F (0°C) up to 35°C (95°F).

HARVESTING: After 3 to 7 days, the surface of the media will start to shimmer with the movement of the microworms. The mixture will become thin and soupy. You will also see that microworms start climbing up the sides of the container. It means that it is time to harvest. The main reason why Microworms climb on the walls is that they try to escape from the excess carbon dioxide, making it easy to collect them with an old toothbrush, cotton swab, or brush. If the worms do not crawl along the edge, it means that the ventilation is too excessive or the temperature is too low.

- Take a soft brush and gently collect the worms from the walls of the container.
- Prepare a small jar of water and rinse the brush with the worms in it.
- Shake the small jar and wait for the worms to settle at the jar's bottom.
- Pour off the cloudy water once it has become entirely clear.
- Repeat the process until the water in the jar is entirely transparent.
- Pour the worms into the aquarium.